Notice of Allowability	Application No.	Applicant(s)	
	10/702,150	DESAI, KEYUR B.	
	Examiner	Art Unit	
	Hien X. Vo	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *application filed on 11/04/2003*.

2. ☒ The allowed claim(s) is/are *1-48*.

3. ☒ The drawings filed on *04 November 2003* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 11/04/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 11/04/03. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Allowable Subject Matter

1. Claims 1-48 allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Although the prior art disclose several claimed limitations, for example:

Kennedy (U.S. 2003/0172150) discloses a method of operating a network system may involve receiving data indicating a configuration of components that are included in the network system, detecting a failure of one of the components, computing an availability (e.g., by calculating the instantaneous availability) of the network system from the data in response to detecting the failure, and storing data indicative of the availability of the network system.

Beuning et al. (U.S. Patent No. 5,640,319) disclose the system associates a process which executes the service with each service. The code for a service defines

a finite state machine which is continually executed by the service's process. While in a given state, the finite state machine may traverse a decision graph which is directly accessible to the process. Actions to be taken on traversal of a node of the decision graph may be defined in the finite state machine. The service's process communicates with other processes and with itself by means of inter process messages. Each state of the finite state machine contains event handlers for responding to messages received by the service's process.

Zager et al. (U.S. Patent No. 6,393,386) disclose a method and system are provided for use in administering a complex system, such as a distributed computing ensemble. A model of the system being administered is prepared, preferably during runtime of the invention, by a combination of auto discovery processes and manual input of information as needed. The model represents not only the resources found in the administered system, but also the service-relationships among those resources. The system administrator also can define elements in the model corresponding to arbitrary groupings of already-existing parts of the model. Software agents, which can be reconfigured, started and terminated as desired during runtime, report changes in state of the managed resources to the model, which updates itself and explores portions of the model adjacent (in terms of the service relationships) to the affected resource(s).

As per claims 1 and 31, none of the prior art teach singularly or in combination an implementation of a plurality of subcomponent finite state machines for subcomponents of the system, wherein each subcomponent finite state machine indicates output values

for combinations of input state values related to states in the subcomponent; providing an implementation of a system finite state machine having output values for combinations of the output values from the subcomponent finite state machines; and for each subcomponent finite state machine, determining the output value by:

(i) determining the input state values of the subcomponent; and

(ii) processing the subcomponent finite state machine with the determined input state values to determine the subcomponent output value; and

processing the system finite state machine with the determined subcomponent output values to determine the system output value.

With respect to claims 9 and 39, none of the prior art teach singularly or in combination an implementation of an administrative policy finite state machine indicating at least one action to perform for combinations of input administrative and operational states of the component in the device; determining the input administrative and operational states for the component; and processing the administrative policy state machine with the determined input administrative and operational states to determine at least one action to perform.

With respect to claims 15 and 45, none of the prior art teach singularly or in combination generating implementations of a plurality of subcomponent finite state machine for subcomponents of a system, wherein each subcomponent finite state machine indicates output values for combinations of input state values related to states in the subcomponent; and generating an implementation of a system finite state machine having output values for combinations of the subcomponent output values from

the subcomponent finite state machines, wherein each subcomponent finite state machine is processed with determined input state values for the subcomponent state machine to determine the subcomponent output value, and wherein the system finite state machine is processed with the determined subcomponent output values to determine the system output value.

With respect to claims 19 and 26, none of the prior art teach singularly or in combination a plurality of subcomponents; a computer readable medium including:

(i) a representation of a plurality of subcomponent finite state machines for subcomponents of the system, wherein each subcomponent finite state machine indicates output values for combinations of input state values related to states in the subcomponent; and

(ii) a representation of a system finite state machine having output values for combinations of the output values from the subcomponent finite state machines; and

(c) code capable of being executed in the system to perform:

(i) for each subcomponent finite state machine, determining the output value by:

(a) determining the input state values of the subcomponent; and

(b) processing the subcomponent finite state machine with the determined input state values to determine thet subcomponent output value; and

(ii) processing the system finite state machine with the determined

subcomponent output values to determine the system output value.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien X. Vo whose telephone number is (571) 272-2282. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BRYAN BUI
PRIMARY EXAMINER

Hien Vo
03/15/05